

# Wildlife Populations: Peregrine Falcon

## Background

The peregrine falcon (*Falco peregrinus anatum*) bears the distinction of being the largest falcon in New Jersey, and the world's fastest bird. Like other falcons, peregrines can be distinguished by their long pointed wings and exceptional flight speed. Adult peregrines have slate gray to bluish backs and light-colored breasts with a fine brown horizontal barring that becomes lighter with age. Immatures are brown above with a light colored breast that is streaked vertically with brown markings.

Superior wing speed makes the peregrine extremely proficient at catching avian prey in flight. In New Jersey, their diet consists primarily of pigeons, songbirds, shorebirds and small ducks. Peregrines hunt by soaring high above their prey. Once their target is singled out, they fold their wings and drop headlong toward it. As the peregrine reaches its prey, its wings are extended in a braking motion while the legs are thrust forward in a pendulum motion. The prey is usually killed by the impact of this mid-air collision.

Historic records indicate that peregrines once nested on the cliffs above the Delaware Water Gap, and on the Palisades overlooking the Hudson River, however with the introduction and widespread use of DDT in the 1950s, peregrine populations plummeted. By 1964, peregrines had completely disappeared from the eastern half of the country, prompting federal and state governments to list the species as endangered.



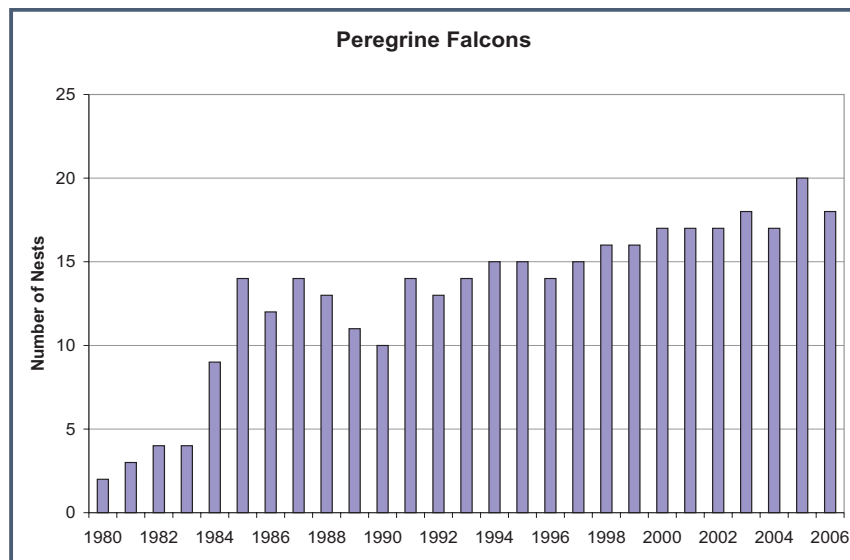
With the ban of DDT in 1972, the Division of Fish and Wildlife began a restoration program in New Jersey. Young peregrines were bred in captivity and released along the coast between 1975 and 1980.

Although the coastal marshes were not considered typical nesting habitat, an abundant prey base and freedom from predation by great horned owls provided a unique opportunity to restore the peregrine population. In 1980 the first wild nesting occurred at Forsythe National Wildlife Refuge in Brigantine. Today, the peregrine's recovery in the New Jersey continues at a slow but steady pace. Each year, the Department's Endangered and Nongame Species Program (ENSP) bands young falcons and gathers information on nesting success and productivity.

## Status and Trends

In New Jersey, peregrines now nest along the Atlantic coast from Ocean to Cape May counties, and on Delaware River bridges from Burlington to Cumberland Counties. Prior to 2003, all nests were on man-made structures, such as nesting towers, water towers, large bridges and high-rise buildings, however a milestone occurred in 2003 when a pair was confirmed nesting on the cliffs of the Palisades overlooking the Hudson River.

Since 1980, the peregrine population has been steadily increasing from 2 nesting pairs to a high of 20 nesting pairs in 2005 (See figure below). In 2006, the peregrine falcon population declined slightly to 18 pairs, but the natural cliff population grew to four pairs, quickly filling their historical niche, with three of the four pairs successfully raising young. In the rest of the state, 11 pairs nested on towers and buildings and the remaining three nested on bridges. The most-watched nesting pair resides atop 101 Hudson Street in Jersey City, where a webcam monitors nesting.<sup>1</sup>



### More Information

[http://www.nj.gov/dep/fgw/ensp/raptor\\_info.htm#peregrine](http://www.nj.gov/dep/fgw/ensp/raptor_info.htm#peregrine)  
<http://www.nj.gov/dep/fgw/peregrinecam/jcp-perfacts.htm>  
<http://www.nj.gov/dep/fgw/ensphome.htm>

### References

<sup>1</sup> <http://www.nj.gov/dep/fgw/peregrinecam/index.html>

The information in this report was provided by the DEP Division of Fish and Wildlife's "The Peregrine Falcon in New Jersey Report for 2006", which can be found at [http://www.nj.gov/dep/fgw/ensp/pdf/pefa06\\_report.pdf](http://www.nj.gov/dep/fgw/ensp/pdf/pefa06_report.pdf) and the Division of Fish and Wildlife's Peregrine Facts webpage, which can be found at <http://www.nj.gov/dep/fgw/peregrinecam/jcp-perfacts.htm>

### Outlook and Implications

The restoration of the peregrine population in New Jersey marks an important conservation achievement. Current indications show that falcons are moving toward their historic nesting eyries on the cliffs of northern New Jersey. Offspring from New Jersey falcons have also provided birds for reintroductions in other states, thereby accelerating the recovery process in the east.

Environmental contaminants such as pesticides, PCBs and heavy metals continue to threaten sensitive components of our ecosystem, including the peregrine falcon. Peregrines and other sensitive species continue to serve as important indicators of the continued presence of these compounds in the environment.

